AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** An image compression method comprising:

a preprocessing step of performing preprocessing on input image data; and

a data compressing step of performing a data compression processing on preprocessed image data, wherein

said preprocessing step includes:

a filtering region dividing step of dividing said input image data into a plurality of filtering regions;

a region designating step of discriminating important regions from unimportant regions in said input image data; and

a filtering step of performing a filtering processing on said unimportant regions for each of said filtering regions to attenuate a high frequency component of said input image data,

said data compressing step includes:

a block region dividing step of dividing said preprocessed image data into a plurality of block regions, each shape of which is rectangular;

an orthogonal transforming step of performing an orthogonal transform processing said image data for each of said block regions; and

a quantizing step of quantizing said image data that has been subjected to said orthogonal transform processing for each of said block regions,

wherein each of said filtering regions is a cluster which is included in and is smaller than said block region, and which is consisting of one or more adjacent rectangular regions, each of the rectangular regions being obtained by equally dividing each of said block regions by 2n (where n is a natural number) and each having a size of two or more pixels, and said filtering processing is performed using a low-pass filter common to said respective filtering regions.

2. **(Currently amended)** An image compression apparatus comprising:

preprocessing means for preprocessing input image data; and

data compressing means for performing a data compression processing on preprocessed image data, wherein

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said preprocessing means includes:

filtering region dividing means for dividing said input image data into a plurality of filtering regions;

region designating means for discriminating important regions from unimportant regions in said input image data; and

filtering means for performing a filtering processing on said unimportant regions for each of said filtering regions to attenuate the high frequency component of said input image data,

said data compressing means includes:

block region dividing means for dividing said preprocessed image data into the plurality of block regions, each shape of which is rectangular;

orthogonal transforming means for performing an orthogonal transform processing on said image data for each of said block regions; and

quantizing means for quantizing said image data that has been subjected to said orthogonal transform processing for each of said block regions,

wherein each of said filtering regions is a cluster which is included in and is smaller than said block regions, and which is consisting of one or more adjacent rectangular regions, each of the rectangular regions being obtained by equally dividing each of said block regions by 2n (where n is a natural number) and each having a size of two or more pixels, and said filtering processing is performed using a low-pass filter common to said respective filtering regions.

3.   **(Currently amended)** The image compression apparatus according to claim 2, wherein said filtering means performs a unification processing for making pixel data within each of said filtering regions discriminated as said unimportant regions coincide with one another.

4.   **(Original)** The image compression apparatus according to claim 2, wherein pickup image data picked up by a monitoring camera is input as said input image data, and said important regions and said unimportant regions are designated by an operator.

5.   **(Original)**   The image compression apparatus according to claim 2, wherein pickup image data picked up by a monitoring camera is input as said input image data, and said important regions and said unimportant regions are determined based on a detection signal from a moving body detection sensor.

6.   **(Canceled)**

7.   **(Original)**   The image compression apparatus according to claim 2, wherein said filtering region dividing means divides said input image data into said filtering regions of two or more types different in size.

8.   **(Original)**   The image compression apparatus according to claim 2, further comprising: an image data output terminal for outputting said preprocessed image data.

9.   **(Currently amended)**   An image transmission system ~~in which~~ comprising:

a preprocessing apparatus ~~is~~ connected to a data compression apparatus through a first communication line, and ~~in which said data compression apparatus is connected to~~

a data expansion apparatus <u>connected to said data compression apparatus</u> through a second communication line, wherein

said preprocessing apparatus includes:

~~the~~ filtering region dividing means for dividing input image data into a plurality of filtering regions;

region designating means for discriminating important regions from unimportant regions in said input image data;

filtering means for performing a filtering processing on said unimportant regions for each of said filtering regions to attenuate a high frequency component of said input image data; and

data transmission means for transmitting said image data that has been subjected to said filtering processing to said first communication line,

said data compression apparatus includes:

block region dividing means for dividing preprocessed image data into a plurality of block regions, each shape of which is rectangular;

orthogonal transforming means for performing an orthogonal transform processing on said image data for each of said block regions;

quantizing means for quantizing said image data that has been subjected to said orthogonal transform processing for each of said block regions; and

data transmitting means for transmitting encoded image data to said data expansion apparatus through said second communication line,

wherein each of the filtering regions is a cluster which is included in and is smaller than said block region, and which is consisting of one or more adjacent rectangular regions, each of the rectangular regions being obtained by equally dividing each of said block regions by 2n (where n is a natural number) and each having a size of two or more pixels, and said filtering processing is performed using a low-pass filter common to said respective filtering regions.

10.   (Original) The image transmission system according to claim 9, further comprising:

an image display apparatus that is connected to said first communication line, and that displays said preprocessed image data.

11.   (Currently amended) A data compression preprocessing apparatus for preprocessing image data input to a data compression apparatus that divides said image data into a plurality of rectangular block regions, each shape of which is rectangular, and that performs an orthogonal transform and a quantization on said input data for each of the block regions, the data compression preprocessing apparatus comprising:

filtering region dividing means for dividing said input image data into a plurality of filtering regions;

region designating means for discriminating important regions from unimportant regions in said input image data; and

filtering means for performing a filtering processing on said unimportant regions for each of said filtering regions to attenuate a high frequency component of said input image data,

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wherein each of said filtering regions is a cluster which <u>is included in and</u> is smaller than said block region, and which is consisting of one or more adjacent rectangular regions, each of the rectangular regions being obtained by equally dividing each of said block regions by 2n (where n is a natural number) and each having a size of two or more pixels, and said filtering processing is performed using a low-pass filter common to said respective filtering regions.

12.   **(Currently amended)**   A computer-readable medium having recorded thereon a computer program for preprocessing image data input to a data compression apparatus that divides said input image data into a plurality of block regions each shape of which is rectangular, and that performs an orthogonal transform and a quantization on said input image data for each of said block regions, the computer program comprising procedures for executing:

a filtering region dividing step of dividing said input image data into a plurality of filtering regions;

a region designating step of discriminating important regions from unimportant regions in said input image data; and

a filtering step of performing a filtering processing on said unimportant regions for each of the filtering regions to attenuate a high frequency component of said input image data,

wherein each of said filtering regions is a cluster which <u>is included in and</u> is smaller than said block region, and which is consisting of one or more adjacent rectangular regions, each of the rectangular regions being obtained by equally dividing each of said block regions by 2n (where n is a natural number) and each having a size of two or more pixels, and said filtering processing is performed using a low-pass filter common to said respective filtering regions.

13.   **(Currently amended)**   The image compression apparatus according to claim ~~2~~ _3_, wherein

said each of the rectangular regions is obtained by equally dividing each of said block regions by 2k in a vertical direction and by 2m in a horizontal direction where k and ~~n~~ _m_ are natural numbers.

14.   **(New)**   The image compression apparatus according to claim 13, wherein

a number of AC coefficients obtained by said orthogonal transform processing is suppressed to be equal to or smaller than k×m.

15.   (New) The image compression apparatus according to claim 3, wherein

said each of the rectangular regions is obtained by equally dividing each of said block regions by 2k in a vertical direction where k is a natural number; and

a number of AC coefficients in the vertical direction obtained by said orthogonal transform processing is suppressed to be equal to or smaller than k.

16.   (New) The image compression apparatus according to claim 3, wherein

said each of the rectangular regions is obtained by equally dividing each of said block regions by 2m in a horizontal direction where m is a natural number; and

a number of AC coefficients in the horizontal direction obtained by said orthogonal transform processing is suppressed to be equal to or smaller than m.